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|--------------------------------|---|---------------------------------|
| <b>Course Title</b>            | : | Digital Imaging and Photography |
| <b>Course Code</b>             | : | CDS251/CDS2251                  |
| <b>No. of Credits/Semester</b> | : | 3                               |
| <b>Mode of Tuition</b>         | : | Sectional Approach              |
| <b>Class Contact Hours</b>     | : | 3 hours per week                |
| <b>Category in Major Prog.</b> | : | Business Elective/Free Elective |
| <b>Prerequisite(s)</b>         | : | Nil                             |

### **Brief Course Description**

This course introduces the basic concepts, techniques, and equipment of Digital Imaging and Digital Photography. It addresses the principles of the hardware and software technologies involved as well as their practical applications in real-world applications. Students will also learn to use current digital imaging software and equipment.

### **Aims**

This course aims to equip students with current knowledge and practical skills in digital imaging.

### **Learning Outcomes**

On completion of this course, students will be able to:

1. Differentiate and assess current digital imaging technologies.
2. Select digital imaging products and equipment for different applications.
3. Apply basic digital imaging and photography techniques.

### **Measurement of Learning Outcomes**

1. Digital imaging technologies and techniques will be covered in the written examination.

2. Students will select and apply digital imaging equipment in particular applications in projects.
3. Students will learn and apply digital imaging techniques through laboratory exercises.

## **Indicative Content**

### Basic concepts

Colour, lens, bitmaps, pixels, image compression, image processing

### Technologies and equipment

Image sensors, image file formats, quality issues, digitization hardware, digitization software, storage technologies, printing technologies.

### Imaging techniques

Image capture, editing, storage and retrieval, indexing, colour management

### Applications

Photo retouching, web page design, computer arts.

### Ethical issues

Intellectual property rights, abuses

## **Teaching Method**

Concepts, technologies, and techniques are introduced through examples during lectures. Students acquire various techniques through hand-on exercises during laboratory sessions. They will also study the common digital imaging applications through practical projects.

## **Assessment**

|                                    |       |
|------------------------------------|-------|
| Class Attendance and Participation | : 5%  |
| Laboratory exercises               | : 30% |
| Project                            | : 25% |
| Examination                        | : 40% |

## **Required/Essential Readings**

K. Eismann, S. Duggan, & T. Grey, *Real World Digital Photography*, 2<sup>nd</sup> ed., Peachpit Press, 2004.

Against The Clock, *Adobe Photoshop 7: Introduction to Digital Images*, Prentice Hall, 2003.

### **Recommended/Supplementary Readings**

Joe Ippolito, *Understanding Digital Photography*, Delmar Learning, 2003.

Adobe, *Adobe Photoshop 7.0 Classroom in a Book*, Adobe Systems, 2002.

J. Ciaglia, *Introduction to Digital Photography*, Prentice Hall, 2002.